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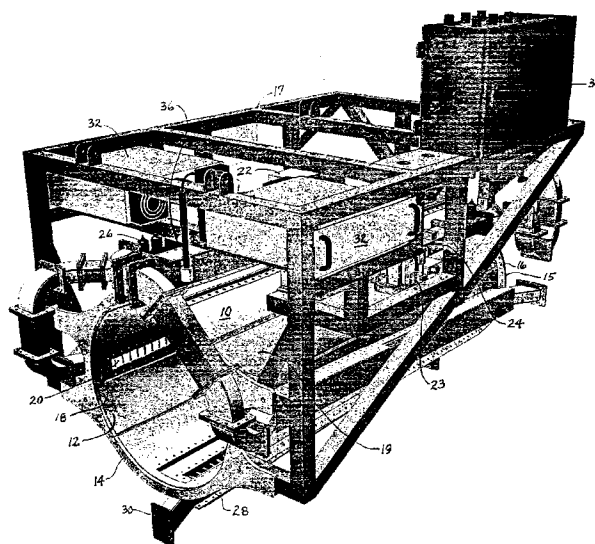
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[Continued on next page]

(54) Title: CYLINDRICAL MICROWAVE CHAMBER



(57) Abstract: Microwave apparatus for exposing materials on an elongated member, such as a mandrel, to microwave energy. The apparatus includes a cylindrical microwave exposure chamber (10). Elongated slots (20) spaced about the circumference of the chamber (10) are in communication with openings (50) in the walls of waveguides (28) attached to the exterior (19) of the chamber. Microwave energy fed into the waveguide (28) is coupled into the chamber (10) through the associated openings (50) and slots (20). Bars (54) spaced apart in the direction of wave propagation span the opening (50) in the waveguide for uniform or customized delivery of microwave energy into the chamber (10). A low-profile mode stirrer (38) at the rear end of the chamber further evens out the energy distribution. A front plate (62) seals to the chamber and supports a rotatable mandrel (60) on which material to be exposed to microwave energy in the chamber (10) is wrapped.

**Declarations under Rule 4.17:**

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR,

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